

APPARATUS AND METHOD FOR LASER POWER CONTROL

Abstract

A high-speed optical disc recording apparatus includes a laser diode for generating multi-pulse light pulses and a photodiode outputting a measured power of the light pulses. An NRZI pattern encoder generates a predetermined power control pattern causing a write strategy generator to generate write strategy to a laser diode driver such that the laser diode outputs a multi-pulse having a fixed-duty ratio with two power levels. The measured power is averaged with a low-pass filter, is sampled and held, and is calibrated according to the fixed-duty ratio. The calibrated held average output of the measured power of the light pulses is compared with predetermined present levels to control the laser diode driver output voltage.